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Peter N. Lalos
Stevens, Davis, Miller & Mosher, OLLP
Suite 850
1615 L Street, NW
Washington, DC 20036-5622

EXAMINER	
CAJILIG, CHRISTINE T	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/645,601	JAECKLIN, FELIX PAUL	
	Examiner	Art Unit	
	Christine T. Cajilig	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/16/06, 6/04/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 24-44* is/are pending in the application.

4a) Of the above claim(s) *42-44* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 24-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 November 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I directed to a supporting structure is acknowledged.

Claims 42-44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/04/07.

Applicant's election with traverse of Species 3a and 1b in the reply filed on 6/04/07 is acknowledged. The traversal is on the ground(s) that each Figures comprise closely related species and are conceptually similar. This is not found persuasive because each of the identified species are materially different in design and these differences between each species would necessitate additional search. The additional search and the determination of patentability for multiple, patentably distinct species would place serious burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

Claims 29 and 40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species that includes Figure 1 (overlapping anchoring device with stacking connection VZ) and Figure 7 (structure with flat material anchoring device on the bottom with rigid supporting structure above) respectively, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/04/07.

This application contains claims 29 and 40 drawn to an invention nonelected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "AE1a" in Figure 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "AV1a" on the second line in page 4, "TKO" and "(MV>F) in claim 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to

the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: Reference notation "E" is used to designate both "tiers" (bottom of page 3) and "a desk" (page 4, line 7).

Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: (1) "at least one anchoring element...with rod-type or mesh type reinforcement" as claimed in claim 33, (2) "the gap...is at least approximately 1 cm, and especially at least approximately 2.5 cm" as claimed in claim 35, (3) "diagonal tie" or "diagonal strut" as claimed in claims 32 and 33.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 30, and 34, and accordingly, all claims dependent therefrom are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant claims the structure as well as "at least one compound filler that *consists* at least partially of bonding-agent-free granulate material and/or bulk material and/or soil material" (emphasis added). There is insufficient description of the filler in the Specification as to whether the filler is the ground or earth retained or a separate element added to the retaining wall structure. The specification does not enable one to make a compound filler, since it is not clear in the specification whether the closed transitional phrase of "consists" would include bonding agent-free granulate material and bulk material and soil material or only bulk material or any combination thereof.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 24-28, 30, 32-36, 38, 41, and accordingly, all claims dependent therefrom are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with double inclusion and lack antecedent basis errors. Most of the recurring errors have been outlined below.

Claim 1 recites the limitation "the structure of at least one tier" in the second to the last line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Regarding claims 2 and 30, it is unclear whether the structure recited after the phrase “optionally” is a true limitation to the claim because the language “optionally” does not require necessarily require such structure. See MPEP § 2173.05(d).

Claim 24 recites the limitation "the other" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 25 appears to have a double inclusion of the limitation “at least one pressure transfer element.” It is unclear if this is the same as or different from the “pressure transfer element” recited in claim 24.

Claim 26 recites the limitation "the one hand" and “the other” in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 26 and 38 utilize the language “its.” The use of “its” renders the scope of the claim to be indefinite because it is unclear as to exactly which limitation or structure the term “its” refers.

Claim 27 is dependent from cancelled claim 3. For purposes of examination, claim 27 is interpreted to be dependent from claim 1.

Claim 28 appears to have a double inclusion of the limitation "at least one anchoring device." It is unclear if this is the same as or different from any of "at least one anchoring device" recited in claim 1.

Claim 28 recites the limitation "the resulting weight pressure" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 30 recites the limitation "the other," "the direction" and "the structure of at least one tier in the number" in lines 3, 3, and 5 of item "c)" respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim 30 appears to have a double inclusion of the limitation "at least one anchoring device." It is unclear if this is the same as or different from any of "at least one anchoring device" first recited the beginning of item b).

Regarding claims 32 and 33, the claim uses the language of "diagonal tie" or "diagonal strut." From the understanding of the Figures, the tie does not appear diagonal (i.e. extending in an oblique or slanted direction). Therefore, it is unclear as to what element in the Figures is being referred to a "diagonal tie [or strut]."

Claim 34 recites the limitation "the supporting structure" in line 1 of item "b)". There is insufficient antecedent basis for this limitation in the claim.

Claim 34 recites the limitation "the supporting structure (TK3)" in line 2 of item "c)". There is insufficient antecedent basis for this limitation in the claim.

Claims 34 and 41 utilizes the language "it" in line 2 of item "c)" in claim 34 and the last line of claim 41 respectively. The use of "its" renders the scope of the claim to

be indefinite because it is unclear as to exactly which limitation or structure the term "its" refers.

Claim 34 recites the limitation "the area of the supporting structure" in line 2 of item "c)." There is insufficient antecedent basis for this limitation in the claim.

Claim 34 recites the limitation "this gap" in line 3 of item "c)." It is unclear if this is another gap or if "this gap" refers to "a gap" presented in line 2 of item "c)."

Regarding claim 34, it is unclear if a "rigid supporting structure" in item a), "the supporting structure" in item b), and "the supporting structure" in item c) all refer to one supporting structure if each of the supporting structures of a), b), and c) are all different and separate supporting structures. Furthermore, the language of "the area of the supporting structure" in the second line of item c) adds to the indefiniteness of the claim because it is unclear as to which supporting structure is being referred.

The term "at least approximately" in claim 35 is a relative term, which renders the claim indefinite. The term "at least approximately" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. As such, the limitation of lengths 1 cm and 2.5 cm has been rendered indefinite.

Claim 36 recites the limitation "the area" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites "at least one first structure with solid anchoring devices" and "at least one second structure with flat-material anchoring devices." It is unclear the first

and second structures are intended to further define structures already described in claim 34 or if these are separate structures. For purposes of examination, and in consistency with the drawing shown in Figure 6, the first structure is interpreted to be the at least one essentially rigid supporting structure in claim 34 and the second structure is interpreted as the supporting structure in item c) of claim 34.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 24-26, 28, and 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammer (U.S. Patent No. 5,688,078).

Regarding claim 1, Hammer in Figure 1 discloses a structure comprising a) at least one essentially rigid supporting structure (0) designed as a projection that has a plurality of support elements (26) arranged one above the other in tiers (14), as well as at least one compound filler (46) that consists at least partially of soil material; b) at least one anchoring device (20) connected to the supporting structure, the at least one anchoring device extending, into the compound filler; wherein: c) at least one anchoring device (bottom most 20) is designed as a overturning-moment receiver that is designed to be resistant to bending in at least certain sections within an area that extends in the compound filler (46) and is connected to the supporting structure (0) in an end area (24)

facing the supporting structure (0) in such a way as to transfer moment, wherein a structure of at least one tier differs from the structure of another tier in the number of anchoring devices.

Regarding claim 2, Hammer further discloses that at least one anchoring device (second to the bottom 20) has a plurality of anchoring elements (36) that are arranged one after the other in the direction toward the interior of the compound filler (46), designed as concrete structures, and are connected together in such a way (via 32) as to transfer moment.

Regarding claim 24, Hammer further discloses that within the transfer of moment between at least one anchoring element (36) and at least one adjacent anchoring element (36) there is at least one tensile-force transfer element (32) and at least one pressure-transfer element (50 in Figure 5).

Regarding claim 25, Hammer further discloses that at least one pressure transfer element (50) is provided that is able to deform transversely and resist buckling.

Regarding claim 26, Hammer further discloses that within the transfer of moment between at least one anchoring element (36) and at least one adjacent anchoring element (36) or the supporting structure (TK1), on the other, there are at least one tensile-force-transfer element (ZE) and at least one area that is located relative to its axis of action (XX) with a gap under the tensile-force-transfer element and that acts as a pressure-transfer element (DB) at the respective anchoring element or the supporting structure (TK1).

Regarding claim 28, Hammer further discloses that at least one anchoring device (20) is provided that has at least one compound-filler-support surface (36) that extends transversely to resulting weight pressure of the compound filler and is associated with at least one tier (14) of the supporting structure (0).

Regarding claim 30, Hammer in Figure 1 discloses a structure comprising a) at least one essentially rigid supporting structure (0) designed as a projection that has a plurality of support elements (26) arranged one above the other in tiers (14), as well as at least one compound filler (46) that consists at least partially of soil material; b) at least one anchoring device (20) connected to the supporting structure, the at least one anchoring device extends into the compound filler (46); c) at least one anchoring device (bottom most 20) comprises a plurality of at least partially rigid anchoring elements (36) that are designed as concrete structures, are arranged one after another in a direction from the supporting structure (0) into the compound filler (46), and are connected to one another as well as to the supporting structure (via elements 32) in such a way as to transfer tensile forces, and wherein a structure of at least one tier differs from a structure of another tier in a number of anchoring devices.

Regarding claim 31, Hammer further discloses that the anchoring elements (36) are connected to one another and to the supporting structure in such a way as to be able to move transversely.

Regarding claim 32, Hammer further discloses that the anchoring elements (36) are connected to one another and to the supporting structure by means of a transversely deformable tie (32).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer (U.S. Patent No. 5,688,078) in view of Babcock (U.S. Patent No. 5,468,098). Regarding claim 27, Hammer further discloses at least one tensile-force transfer element (32) that is designed to deform transversely but not bend. However, Babcock in Figure 6a discloses the use of metal connecting members (63) that are able to bend in order to better accommodate load and pressure. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Hammer to have at least one tensile-force transfer element (32) that is designed to bend as taught by Babcock to provide a more accommodating material. Furthermore, it would have been obvious to one having ordinary skill in the art at the time of invention to use bendable material such as metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer (U.S. Patent No. 5,688,078) in view of Hilfiker (U.S. Patent No. 3,922,864).

Regarding claim 32, Hammer further discloses that at least one anchoring element (36), is a concrete element and, is connected to an adjacent anchoring element by means of at least one reinforcement section that is run out and is designed as a diagonal tie and/or diagonal strut (32), but does not disclose that the concrete element has rod-type or mesh-type reinforcement. However, reinforced concrete structures are old and well known in the art. Nonetheless, Hilfiker in Figure 4 discloses a retaining wall wherein a concrete element (12, 40) with rod-type reinforcement (50, 52). Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Hammer to have concrete elements with rod-type reinforcement as taught by Hilfiker to provide strength and rigidity to a concrete structure.

Claims 34-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitziller (U.S. Patent No. 5,131,791) in view of Khamis (U.S. Patent No. 6,565,289 B2).

Regarding claim 34, Kitziller discloses a structure comprising a) at least one essentially rigid supporting structure (12) designed as a projection that has a plurality of support elements (16) arranged one above the other in tiers, as well as at least one compound filler (20) that consists at least partially of soil material; b) at least one anchoring device (38) connected to the rigid supporting structure (12), extending into the compound filler; c) at least one flat-material strips (30) of at least one anchoring device (30) is run at a supporting structure (14), but does not disclose that the at least

one flat-material strip is run in the area of the supporting structure with a gap between the supporting structure and a connecting element and the gap is at least partially filled with the material of the compound filler. However, Khamis in Figures 2 and 3 discloses an alternate means for securing flat material strips on retaining wall structures wherein at least one flat-material strips (16) of at least one anchoring device (16) is run at a supporting structure (12) in the area of the supporting structure with a gap (between walls 50 and 42) between the supporting structure (12) and a connecting element (50) and the gap would obviously be at least partially filled with the material of a compound filler, since there is no obstruction that would prevent the compound filler from entering the gap when the construction is being backfilled. Therefore, it would have been obvious to a person having ordinary skill in the arts at the time of the Applicant's invention to modify the structure of Kitziller to have the at least one flat-material strip is run in the area of the supporting structure with a gap between the supporting structure and a connecting element and the gap is at least partially filled with the material of the compound filler as taught by Khamis to provide a self-connecting means securing the reinforcement anchor to the stacked facing blocks (Col 3, Ln 51-59).

Regarding claim 35, Kitziller in view of Khamis discloses the structure discussed above, and further discloses that the gap between the supporting structure and the flat-material strip is at least 1 cm.

Regarding claim 36, Kitziller in view of Khamis discloses the structure discussed above and further discloses that in the area of the gap between the supporting structure

and the flat material strip (16), at least a portion of the material filler transfers tensile forces from the flat-material strip to the supporting structure.

Regarding claim 37, Kitziller in view of Khamis discloses the structure discussed above and further discloses that the flat-material strip (16) follows a loop-like path through an opening of an element (defined by walls 50 and 53) in the supporting structure that is designed, in particular, as a frame.

Regarding claim 38, Kitziller in view of Khamis discloses the structure discussed above and further discloses that a loop of the flat-material strip (16) with material filler is designed as a cushioning element for transferring compressive forces.

Regarding claim 39, Kitziller in view of Khamis discloses the structure discussed above and further discloses a guide (surfaces of wall 50) that has two layers at least in certain sections for the flat material strips (16).

Regarding claim 41, Kitziller in view of Khamis discloses the structure discussed above and further discloses that the at least one essentially rigid supporting structure (12) is at least one first structure with solid anchoring devices that is provided as an underlying foundation structure and the at least one supporting structure (14) is at least one second structure with flat-material anchoring devices are provided as a superstructure arranged above the first structure.

Response to Arguments

Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 6/16/06 have been fully considered but they are not persuasive. The 35. U.S.C. 112 first paragraph rejection is maintained. See explanation of rejection above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Knudsen (US 540327) a retaining wall structure; Golcheh (US 6675547) a retaining wall superstructure; Lothspeich (US 6505999 B1) a geogrid retaining wall.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Cajilig whose telephone number is (571) 272-8143. The examiner can normally be reached on Monday - Friday from 9am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CTC/
8/06/07

LANNA MAI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600